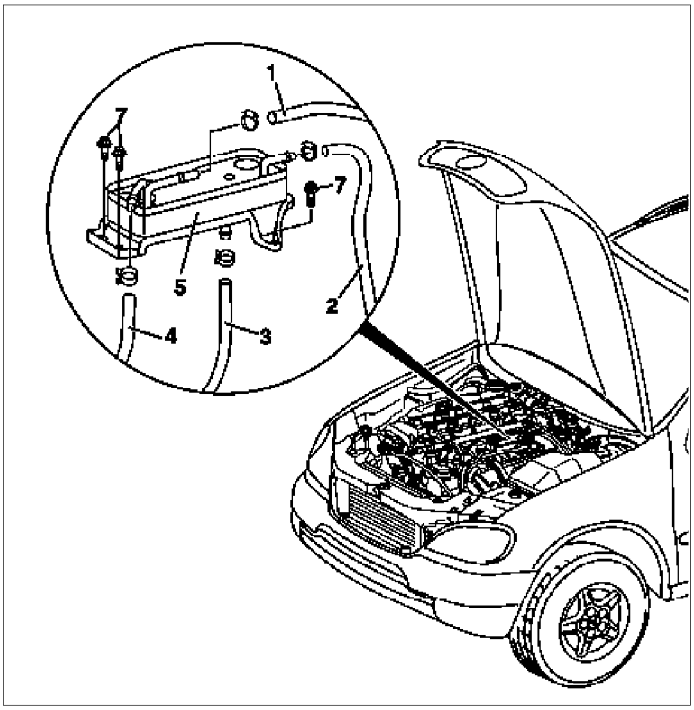
ENGINE 612.963 in MODELS 163.113

1 Fuel feed hose
2 Fuel drain hose
3 Coolant feed hose
4 Coolant return flow hose
5 Fuel cooler
7 Bolts of fuel cooler



P47.00-2042-12

Operation no. of operation texts or standard texts and flat rates

Category	Op. no.	Operation text
P	075890	REMOVING AND INSTALLING FUEL COOLER
P	075895	REPLACE FUEL COOLER

	Remove, Install		
⚠ **Danger!**	**Risk of injury** to **fingers being jammed or squeezed** when removing and installing or aligning hoods, doors, tailgate/tailgate and sliding roof.	When moving components ensure that no body parts or limbs are in the area of motion.	AS00.00-Z-0011-01A
⚠ **Danger!**	**Risk of injury** to skin and eyes suffering scalding from contact with hot coolant spray. **Risk of poisoning** from swallowing coolant.	Do not open cooling system unless coolant temperature is below 90 °C. Open cap slowly and release the pressure. Do not pour coolant into beverage bottles. Wear protective gloves, protective clothing and eye protection.	AS20.00-Z-0001-01A
⚠ **Danger!**	**Risk of explosion** from fuel igniting, **risk of poisoning** from inhaling and swallowing fuel as well as **risk of injury** to eyes and skin from contact with fuel.	No fire, sparks, naked flames or smoking. Pour fuels only into suitable and appropriately marked containers. Wear protective clothing when handling fuel.	AS47.00-Z-0001-01A
1	Open engine hood and raise to vertical position	Have second person secure hood.	AR88.40-P-1000GI
2	Remove trim panel of cylinder head cover	 Nm Nm	AR01.20-P-5014-02B *BA01.20-P-1002-01A *BA01.20-P-1003-01A
3	Drain coolant	At radiator.	AR20.00-P-1142M
4	Close fuel feed hose (1) at the fuel cooler (5)	Set of plugs	*129589009100 *WH58.30-Z-1001-06A *WH58.30-Z-1002-06A
5	Detach fuel outlet hose (2)	Clamp Set of plugs	*000589543700 *129589009100 *WH58.30-Z-1001-06A *WH58.30-Z-1002-06A
6	Disconnect coolant return flow hose (4) to thermostat housing	Hose clamp pliers (length 210 mm; adjustment range 80 mm)	*WH58.30-Z-1026-02A
7	Unscrew bolts (7) at fuel cooler		

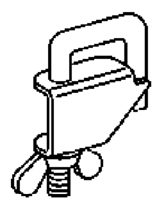
8	Disconnect coolant feed hose (3) to fuel cooler	Raise fuel cooler. Hose clamp pliers (length 210 mm; adjustment range 80 mm)	*WH58.30-Z-1026-02A
9	Install in the reverse order		
Danger! 10 (Note)	**Risk of accident** as vehicle may start off by itself with the engine running. **Risk of injury** as working around the engine during start-up or while running may result in contusions and burns Pour in coolant Note on coolant level	Secure vehicle to prevent it from moving off by itself. Wear closed and tight-fitting work clothes. Do not grasp hot or rotating parts. Switch heater to maximum and warm up engine at moderate revs. Top up coolant constantly at coolant expansion reservoir. Close coolant expansion reservoir once coolant temperature is 60-70 °C. Models 124, 129, 140, 168, 170, 202, 208, 210, 220, 463	AS00.00-Z-0005-01A *BF20.00-P-1001-02E AH20.00-P-1142-01A
11	Inspect cooling system for leaks		AR20.00-P-1010HA
12	Run engine and inspect fuel system for leaks		

Crankcase ventilation, cylinder head cover

Number	Designation		Engine 612.963
BA01.20-P-1002-01A	Screw of trim panel of cylinder head cover to cylinder head cover	NM	10
BA01.20-P-1003-01A	Screw attaching cover panel to charge air distribution pipe	NM	10

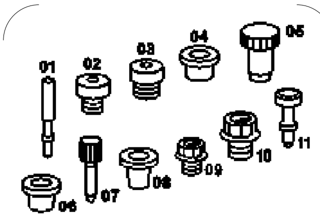
Cooling system

Number	Designation			Engine 612.963
BF20.00-P-1001-02E	Cooling system	Total capacity	Liter	Y 11,0
		Capacity of anticorrosion/ antifreeze agent down to -37 °C	Liter	Y 5,5
		Capacity of anticorrosion/ antifreeze agent down to -45 °C	Liter	Y 6,25
		Specifications for Service Products	Sheet	BB00.40-P-0310-01A
			Sheet	BB00.40-P-0325-02A



000 589 54 37 00

Circuit



129 589 00 91 00

Set of closure plugs

Commercially available tools (see Workshop Equipment Manual)

Number	Designation	Make (e.g.) g.)	Order number

WH58.30-Z-1001-06A	6 mm socket hexagon on flexible shaft for hose clamps with worm drive	Hazet Güldenwerther Bahnhofstrasse 25-28 D-42857 Remscheid	426-6
WH58.30-Z-1002-06A	7 mm hexagon socket wrench to flexible shaft for hose clips with worm drive	Hazet Güldenwerther Bahnhofstrasse 25-28 D-42857 Remscheid	426-7
WH58.30-Z-1026-02A	Hose clamp pliers (length 210 mm; adjustment range 80 mm)	Hazet Güldenwerther Bahnhofstrasse 25-28 D-42857 Remscheid	798-12